DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026699

Address: 333 Burma Road **Date Inspected:** 07-Nov-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 600 **OSM Departure Time:** 1630 Prime Contractor: American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A

N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

At the start of the shift this Quality Assurance Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) Quality Control (QC) personnel. The observations and inspections were performed as noted below:

A). This Quality Assurance Lead Inspector (QALI) assigned the QAInspectors to the following, but not limited to the work station(s) listed, to observe the welding and the QC inspection of the following:

Craig Hager-OBG 12E/13E (Longitudinal Stiffeners) and W13/W14 ("A" Deck)

Art Peterson-Lifting Lug Holes at OBG W11

Joselito Lizardo-Lifting Lug Holes and Drip Rail at OBG E14 (SPCM)

Quality Assurance Lead Inspector (QALI) Summary

This QA Lead Inspector (QALI) observed the QA Inspector's Craig Hager, Art Peterson and Joselito Lizardo monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures for compliance with the contract specifications. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift, this QA Lead Inspector discussed and reviewed the work performed by the QAI's in

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regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and no issues were noted on this date.

Jacking Frame Issue

Structures Representative, Douglas Wright, contacted this QALI in regards to a linear indication observed on the jacking frame located at the west end of the W2 bent. This QALI performed a visual inspection of the area and concurred with Mr.Wright. At this time, Structural Materials Representative (SMR) Kit Guest was present at this time and contacted QA Supervisor, William Levell to inform him of this issue. This QALI contacted QC Lead Inspector Bonifacio Daquinag, Jr. and informed of this issue and shortly therafter, Mr. Daquinag, QC inspector's Jesse Cayabyab and Bernie Docena arrived at this location. Mr. Daquinag directed the QC inspector's to perform a Magnetic Particle Test (MPT) of the area and at the conclusion of the test two (2) linear indications were revealed and appeared, accordingly, to be aproximately 50 mm-long and 190 mm-long. At this time Mr. Daquinag informed this QALI that he would contact Leonard Cross, Quality Control Supervisor, to request a directive of how to proceed.

For additional detailed information see the individual, submitted and approved, QAWeld Inspection Reports (WIR).

This QA Inspector continued the daily review of field inspection reports and update of the field document control tracking records regarding the Orthotropic Box Girders (OBG, Longitudinal and Transverse "A" Deck Stiffeners, Deck Access Holes and the Tower Shear plates).

See the digital photograph below illustrates some the related work observed during this shift.



Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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Inspected By:	Reyes, Danny	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer